Multiplication facts - 2 times table

Counting in 2 s will help you know many times table facts.

1 Complete each pattern by counting in 2 s :
a

b

c


2 Show how many dots there are in each array by counting in 2 s . Then write the times table fact below:

a 6 twos

d 5 twos


b 8 twos

e 4 twos


c 3 twos

f 9 twos


## Multiplication facts - 2 times table

3 How many wings are in:
a 3 butterflies?
$\square \times 2=\square$
b 10 butterflies?
$\square \times 2=\square$
c 5 butterflies?
$\square \times 2=\square$
d 2 butterflies?
$\square$


4 How many wheels have:
a 4 bikes?

$$
7 \times 2=\square
$$

$\square$
c 7 bikes?
$\square$
b 9 bikes?
d 3 bikes?
$\square$
$\square \times 2=\square$
$\square$


5 Double each number:
a $6 \times 2=\square$
b $9 \times 2=\square$
c $8 \times 2=$ $\square$
d $7 \times 2=$ $\square$

6 Complete this doubling wheel. These facts are not in the 2 times table, but they are facts that are useful to know.


Multiplication facts - 4 times table

Practise your 4 times table.

1) Write the multiplication fact for each array:

a 3 fours

b 4 fours


c 5 fours

d 6 fours


e 7 fours


f 9 fours


2 How many strawberries are there on:
a 4 plates?

b 3 plates?

c 7 plates?
$\square$
d 9 plates?
$\square$

e 2 plates?


SERIES

## Multiplication facts - 4 times table

(3) Here is a half of a hundred chart:
a Circle the counting pattern of 2 s . Cross the counting pattern of 4 s .
b What do you notice?

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |

$\qquad$
$\qquad$

4 Complete the matching $\times 2$ and $\times 4$ facts:
a $6 \times 2=12$ and $3 \times 4=12$


So,


> Can you see that the $\times 4$ arrays have half the rows and double the columns of the $\times 2$ ? This means there is the same total, but the array is arranged differently.

c $8 \times 2=\square \times 4$
d $10 \times 2=\square \times 4$

## Multiplication facts - 3 times table

Practise your 3 times table.

1 Use this array to complete the 3 times table:


2 Now try them mixed up:
a $3 \times 3=\square$
b $8 \times 3=$ $\square$
c $7 \times 3=\square$
d $10 \times 3=$ $\square$
e $2 \times 3=\square$
f $4 \times 3=\square$
g $5 \times 3=$ $\square$ h $6 \times 3=\square$
i $9 \times 3=\square$
j $1 \times 3=$ $\square$

3 Alfred is an alien from the Planet Trampolon. The surface of Planet Trampolon is like walking on a trampoline. That's why Alfred and all his race of aliens need 3 legs for extra balance. They also have 3 fingers on each hand and 3 eyes.
a How many legs for:
6 aliens?
$6 \times$ $\square$ $=$ $\square$
b How many eyes for:
3 aliens?
$\square$
$\square$
$\square$
c How many fingers on one hand for:

4 aliens?

$$
4 \times \square=\square
$$

10 aliens?
$\square$
$\times$ $=$

9 aliens?


5 aliens?



Multiplication facts - 3 times table
4 Label the number line so it goes up in 3s:


5 Write two turnaround facts for each array. The first one has been done for you.

d





## Multiplication facts - 6 times table

Practise your 6 times table. Did you know that we can use $\times 6$ for short? So $\times 6$ just means 6 times table, just as $\times 3$ means 3 times table.

1 Use this array to complete the 6 times table:



2 Fill in the missing numbers:
a

b

c $\square \times 6=18$
d

$\mathbf{e} \square$ $\times 6=60$
f $\square$ $\times 6=12$
g


3 Complete this table by recalling the 3 times table. Then complete the 6 times table. Can you see how the 3 times table helps with the 6 times table?

|  | 3 | 8 | 2 | 5 | 9 | 10 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\times 3$ |  |  |  |  |  |  |  |
| $\times 6$ |  |  |  |  |  |  |  |

4 Solve these problems.
a I saved $\$ 7$ every week over 6 weeks.
How much did I save in total?

b 8 pencil cases had 3 blue pens in each. How many blue pens are there in total? $\square$
c 9 vases each had 6 flowers.
How many flowers were there in total?


## Multiplication facts - 6 times table

You know more times tables facts than you
 realise. For example, knowing your $\times 5$ can help with your $\times 6$.
The array shows 3 rows of 5 . If we add another dot to each row we can change 3 rows of 5 to 3 rows of 6 . This is called building up.

$$
3 \times 5=15+3 \longrightarrow 3 \times 6=18
$$

5 Change these $\times 5$ arrays into $\times 6$ arrays.
a

b


6 Complete this table to show how to change a $\times 5$ array to a $\times 6$ array by building up. The first one has been done for you.

| $\times 5$ | Build up by | $\times 6$ |
| :---: | :---: | :---: |
| a | $3 \times 5=15$ | 3 |
| b | $2 \times 5=10$ |  |
| c | $7 \times 5=35$ |  |
| d | $4 \times 5=20$ |  |
| e | $6 \times 5=30$ |  |
|  |  |  |
|  | $9 \times 5=45$ |  |

Practise your 9 times table.

1 Use this array to complete the 9 times table:


| $1 \times 9=$ |
| :---: |
| $2 \times 9=$ |
| $3 \times 9=$ |
| $4 \times 9=$ |
| $5 \times 9=$ |
| $6 \times 9=$ |
| $7 \times 9=$ |
| $8 \times 9=$ |
| $9 \times 9=$ |
| $10 \times 9=$ |

2 Complete these $\times 9$ facts. Look out for turnarounds.
a $3 \times 9=\square$
b $9 \times 4=\square$
c $6 \times 9=\square$
d $2 \times 9=\square$
e $9 \times 5=\square$
f $1 \times 9=\square$

3 Find the cost of these items:
a 6 fruit salads $=\square$
b 4 banana $\begin{array}{r}\text { smoothie }\end{array}$
d 5 fruit salads $\square$
c 3 mango juices $=$ $\square$
e 3 banana smoothie
$\square$ f 7 mango juices = $\square$

## Multiplication facts - 9 times table



$$
3 \times 9=?
$$

If you get stuck on $a \times 9$, remember the $\times 10$ fact and build down.

$$
3 \times 10=30-3 \longrightarrow 3 \times 9=27
$$

4 Change this $\times 10$ array into a $\times 9$ array:

$4 \times 10=\square-4 \longrightarrow 4 \times 9=\square$

5 Complete this table to show how to change a $\times 10$ array to $\mathrm{a} \times 9$ array by taking 1 from each row.

| $\times 10$ | Build down by | $\times 9$ |
| :---: | :---: | :---: |
| $3 \times 10=30$ | 3 | $3 \times 9=27$ |
| $5 \times 10=50$ |  |  |
| $9 \times 10=90$ |  |  |
| $6 \times 10=60$ |  |  |
| $4 \times 10=40$ |  |  |
| $2 \times 10=20$ |  |  |
| $8 \times 10=80$ |  |  |
| $7 \times 10=70$ |  |  |

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## Multiplication facts - square numbers

A square number is a number multiplied by itself.
These arrays show the first 3 square numbers.

$1 \times 1=1$
1 squared = 1

$2 \times 2=4$
2 squared $=4$

$3 \times 3=9$
3 squared $=9$

1. Here is another way to show square numbers. Look at the array shown on each grid and write the square number multiplication:
a

|  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

$\square$
4 squared $=\square$
b

$\square$
$\square$

6 squared = $\square$
c

7 squared $=\square$

2 On this grid, shade the largest square number you can:

$\square$
$\square$ squared $=\square$

3 Answer these:
a $81=$ $\square$ squared
b $25=\square$ squared
c $64=\square$ squared

## Multiplication facts - multiples

When two numbers are multiplied together, the answer is called a multiple. For example, the first 3 multiples of 5 are 5, 10, 15 .
$1 \times 5=5$
$2 \times 5=10$
$3 \times 5=15$

1. Complete the list of multiples for each number in the circle:
a

b


c

$\square$
$\square$
$\square$
$\square$
$\square$
d


| 3 | 6 |  |  |
| :--- | :--- | :--- | :--- |

$\square$
$\square$
$\square$
$\square$
2. In each group of multiples, cross out the number that does not belong. You will need to look carefully, because they are not in order.

| a Multiples of 5 | 10 | 20 | 35 | 40 | 12 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| b Multiples of 6 | 12 | 6 | 29 | 24 | 18 |
| c Multiples of 8 | 25 | 16 | 32 | 40 | 8 |

3 Use the clues to work out the multiples:
a This number is a multiple of both 9 and 3 and is less than 20 but greater than 10 . $\square$
b This number is a multiple of 5 . It is greater than 15 but less than 25 . $\square$
c This number is a multiple of both 4 and 8 and is the next squared number after 9 .


